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NOTICE OF PROPOSED MODIFICATION TO

CALIFORNIA CODE OF REGULATIONS

TITLE 8: Chapter 4, Subchapter 7, Article 59, Section 4324 of the General Industry Safety Orders

Dust Collection Systems for Woodworking Machines

Pursuant to Government Code Section 11346.8(c), the Occupational Safety and Health Standards Board (Standards Board) gives notice of the opportunity to submit written comments on the above-named standards in which modifications are being considered as a result of public comments and/or Board staff consideration.

On May 4, 2007, the Standards Board issued a Notice of Proposed Modifications containing revisions to Title 8, Section 4324 of the General Industry Safety Orders. The Standards Board received written comments on the proposed revisions. The standards have been further modified as a result of these comments and Board consideration.

A copy of the full text of the standards with the modifications clearly indicated are attached for your information. In addition, a summary of all written comments regarding the Notice of Proposed Modifications and staff responses is included.

Any written comments on these further modifications must be received by 5:00 p.m. on July 26, 2007, at the Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833. The standards will be scheduled for adoption at a future business meeting of the Standards Board.

The Standards Board's rulemaking files on the proposed action are open to public inspection Monday through Friday, from 8:00 a.m. to 4:30 p.m., at the Standards Board's office at 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833.

Inquiries concerning the proposed changes may be directed to Keith Umemoto, Executive Officer at (916) 274-5721.

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date: July 6, 2007

Keith Umemoto, Executive Officer

SECOND 15-DAY
NOTICE OF MODIFICATIONS
Modifications are indicated by bold, italic double underscore for new language, and bold, italic double strikeout for deleted language.

(First 15-Day Notice of modifications are indicated in bold, double underline wording for new language, and bold, strikeout for deleted language.)

PROPOSED STATE STANDARD,
TITLE 8, CHAPTER 4

Amend Section 4324 to read:

4324. ~~Exhaust~~ Dust Collection Systems.

(a) Use of dust collection systems for the removal of wood dust and chips produced by woodworking machines shall conform to this section.
(1) Suitable ~~exhaust~~ dust collection systems shall be required whenever the chips and ~~sawdust~~ wood dust produced by woodworking machines accumulate ~~on the floor~~ so as to endanger employees.
Note: Additional requirements for all mechanical ventilation systems are contained in Section 5143.
(b) Definitions.
(1) Dust Collection System. An exhaust system that is designed to capture wood dust, chips and other wood particulates at the point of generation, usually from multiple sources, and to convey the material to a point of consolidation. A dust collection system includes the collection hood, the exhaust fan, the dust collector, and all ducts, flexible hoses or other devices used for conveying the material.
(2) Dust Collector. The part of the dust collection system where the material is separated from the air stream and consolidated. Dust collectors include conventional solid-walled cyclones and baghouses, and enclosureless bag-type units.
(3) Enclosureless Bag-Type Dust Collector. A dust collector that possess all of the following characteristics:
(A) The filtration is accomplished by passing dust-laden air through filter media, collecting the dust on the inside of the filter media, and allowing cleaned air to exit to the surrounding area.
(B) The filter medium is not enclosed in a solid-walled container.
(C) The filter medium is hand shaken, not mechanically shaken or pressure-pulsed.
(D) The filter medium is under positive pressure.
(E) Removal of the collected dust is not continuous or mechanical.
(c) Location of dust collectors. Dust collectors having a maximum air-handling capacity greater than 500 cubic feet per minute (cfm) shall be located in accordance with one of the following:
(1) Outdoors.
(2) In detached rooms of fire-resistant construction and provided with adequate explosion vents.
(3) Inside of buildings **~~if~~ provided that** the collectors are liquid-spray type collectors.
(4) Inside of buildings **~~if~~ provided that** the collectors are enclosureless bag-type dust collectors that meet all the following criteria:
(A) The collector is used only for dust pickup from woodworking or wood processing machinery (i.e., no metal grinders, painting and finishing operations, or other operations that may increase the risk of fire or explosion).
(B) The collector is not used on sanders or abrasive planers having mechanical feeds.
EXCEPTION: ***Mechanically fed abrasive ~~S~~s*anders and abrasive planers *~~with mechanical feeds~~ that* meet*~~ing~~ all of* the following conditions:**

1. ***~~The mechanical feed device is of the rubber belt type, and not a feed device equipped with metal rolls, pawls, chains, tracks or similar mechanisms~~ No more than one abrasive sander or abrasive planer is connected to the same enclosureless bag-type dust collector,* and**

PROPOSED STATE STANDARD,
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2. ~~***The sander or planer is equipped with an electronic load sensor that automatically shuts off the feed device when overloading occurs.***~~ ***The sander or planer is equipped with a cut limiting device that is set to prevent stock from being fed into the sander or planer if the thickness of the stock would cause the machine to make a cut that is deeper than can be safely accomplished without causing excessive friction and without causing burning of the wood and wood dust, and***

3. ***The sander or planer is equipped with an emergency shutoff for operator use that shuts off the mechanical feed and the abrasive belt. The abrasive belt shall be equipped with a brake that stops the belt when the emergency shutoff is activated.***

4. ***The machine operator shall hand feed stock into the mechanical feed and shall visually inspect the stock for any metal objects which shall be removed before feeding the stock into the machine. The operator shall be in close proximity to the machine to monitor the operation and activate the emergency stop when necessary.***

(C) Each collector has a maximum air-handling capacity of 5000 cfm or less.

(D) The fan motor is of a totally enclosed, fan-cooled design.

(E) The collected dust is removed daily or more frequently if necessary to ensure ~~**efficient**~~ **effective** operation.

(F) The collector is located at least 20 feet from the nearest emergency egress route ~~**or employee work station.**~~

EXCEPTION: One enclosureless bag-type dust collector with a maximum air-handling capacity of 1500 cfm may be located within 20 feet of an emergency egress route provided that it is not within 10 feet of an emergency exit.

(G) **The collector is located at least 20 feet from the nearest employee work station.**

EXCEPTION: One enclosureless bag-typed dust collector with a maximum air-handling capacity of 1500 cfm may be located within 20 feet of the nearest employee workstation.

~~**(G)**~~ **(H)** Multiple collectors in the same room are separated from each other by at least 20 ft.

EXCEPTION ~~**to (c)(4)(F) and (c)(4)(G)**~~**: A maximum of two** ~~**E**~~**e**nclosureless bag-type dust collectors **may be located within 20 feet of each other in the same room provided that each collector** ~~**with**~~ **has** a maximum air-handling capacity of 1500 cfm or less.

(d) Bonding and grounding of ducts. Ducts and flexible hoses used to convey air and material as part of dust collection systems shall be constructed of metal or other conductive material **and shall be bonded and grounded to prevent the accumulation of static electricity generated by the airflow. Nonconductive ducts such as PVC pipes shall not be permitted.**

EXCEPTION: Nonconductive flexible ducts and hoses may be used for final machine connection in a length not exceeding the minimum required for machine operation provided that bonding to ground is maintained.

~~(b)~~(e) Guards and collection hoods. Where a~~n exhaust~~ dust collection system is used the guard shall form part or all of the ~~exhaust~~ collection hood ~~**and shall be constructed of a suitable solid material of a thickness not less than that specified in Section 3943**~~ **3942**.

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~~(c)~~(f) Removal of other refuse. Provision for the removal of refuse shall be made in all operations ~~not required to have an exhaust system or~~ having refuse too heavy, bulky, or otherwise unsuitable to be handled by the ~~exhaust~~ dust collection system.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

SUMMARY AND RESPONSE TO COMMENTS

SUMMARY AND RESPONSE TO ORAL AND WRITTEN COMMENTS:

I. Written Comments

Summary and Response to Written Comments to the 15-Day Notice of Proposed Modifications Mailed on May 4, 2007.

Mr. Mike Mendenhall, California Woodworking Machinery, by letter received May 24, 2007.

Comment No 1: Mr. Mendenhall states that he is unaware of any sanders or planers equipped with a load sensing device that limits the heat generated by a sanding belt and that such a shut off device is not feasible.

Response: The Board concurs and has amended the exception to subsection (c)(4)(B) to delete the requirement for a load sensor that automatically shuts off the feed device when overloading occurs.

Comment No 2: It is standard in the woodworking industry for mechanically fed abrasive sanders and planers to have an operator feeding the machine, have emergency shutoffs for operator use in case of overloading, and have cut limiting devices.

Response: The Board concurs and has amended the exception to subsection (c)(4)(B) to add conditions which would require machines to be equipped with a cut limiting device and an emergency shutoff for operator use. In addition, the proposed modification would require the machine operator to hand feed stock into the machine. The Board thanks Mr. Mendenhall for his comments and participation in the rulemaking process.

Mr. Ric Morrison, Production Coach, Sunset Moulding Company, by email sent May 9, 2007.

Comment No 1: Mr. Morrison states that if a friction fire due to a jam-up of material being fed occurs, the majority of the fires will come from the abrasive belts, not the drive system. He does not believe the type of material the driving system is made of will make any difference to this primary cause of a friction fire.

Response: The Board concurs and has amended the exception to subsection (c)(4)(B) to delete the condition which specifies that mechanical feed devices shall be a rubber belt type, and not equipped with metal rolls, pawls, chains, tracks or similar mechanisms.

Comment No 2: The condition in the exception to subsection (c)(4)(B), which specifies that a machine must be equipped with an electronic load sensor that shuts off the machine when overloaded, lacks clarity and may not be effective.

Response: The Board concurs and has deleted the requirement as noted in the response to Mr. Mendenhall's comment no 1. The Board thanks Mr. Morrison for his comments and participation in the rulemaking process.

Mr. Bruce Wick, Director of Risk Management, California Professional Association of Specialty Contractors, by email dated May 23, 2007.

Comment No 1: Mr. Wick requests that the exception to subsection (c)(4)(B) be amended to allow vinyl as well as rubber feeds, while maintaining the prohibition on metal feed devices.

Response: For the reasons discussed in the Board's response to Mr. Morrison's comments, the Board amended the exception to delete all specifications for the types of feed devices that are allowed to be used with abrasive sanders and planers. The proposed modification would allow vinyl feed devices as requested by the commenter.

Comment No 2: Mr. Wick requests that the exception to subsection (c)(4)(B) be amended to delete the requirement that machines be equipped with a load sensor that automatically shuts off the feed device when overloading occurs. Mr. Wick states that such devices are not available or feasible for medium level machines and would not avoid the risk of a fire igniting. Mr. Wick also notes that these types of machines have an operator doing the insertion of the wood piece into the mechanical feed, so an operator is in very close proximity to the machine and has the ability to manually shut off the device.

Response: The Board concurs and has amended the exception consistent with his comments and similar comments from Mr. Mendenhall, as described in the Board's response to Mr. Mendenhall. The Board thanks Mr. Wick for his comments and participation in the rulemaking process.